Request to Archive
With The National Centers for Environmental Information
For Scientific Ocean Drilling Borehole Log Data from LDEO
Provided by LDEO>BRG

2014-09-30

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Robert Arko
LDEO>IODP
Data Administrator
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2. Name the organization or group responsible for creating the dataset.

LDEO>IODP

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The Integrated Ocean Drilling Program (IODP) is an international research program that explores the history and structure of the earth as recorded in seafloor sediments and rocks. IODP builds upon the earlier successes of the Deep Sea Drilling Project (DSDP) and the Ocean Drilling Program (ODP).

The Consortium for Ocean Leadership (COL) (previously Joint Oceanographic Institutions) and its partners, the Lamont-Doherty Earth Observatory (LDEO) of Columbia University and Texas A&M University (TAMU), have been selected by the U.S. National Science Foundation (NSF) to be the IODP United States Implementing Organization (IODP-USIO). IODP-USIO operates the riserless drilling vessel D/V JOIDES Resolution.

Within IODP-USIO, TAMU curates the data acquired from drill cores while LDEO curates the data taken from borehole logs. The borehole data provided by LDEO covers the entire span of NSF-supported scientific ocean drilling through the DSDP, ODP, and IODP programs from CY 1968 (Expedition #1, Hole #1) through CY 2014 (Expedition #352, Hole #U1440B).

Borehole log data includes wave velocity, geochemistry, magnetic susceptibility, caliper, density, gamma ray, nuclear magnetic resonance, porosity, resistivity, spontaneous potential, tempature, inclinometry, magnetic field, and seismic sensor data as well as various acoustic, electrical, and optical images.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1968-08-15 to 2014-09-30

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:
2014-09-30

7. Who are the expected users of the archived data? How will the archived data be used?
Research community. Log data are typically correlated with core data from the same Expedition/Hole.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
Original log data are typically processed to standard units and file format, depth matched, and reviewed by a curator in the LDEO Borehole Research Group.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
Log data are typically correlated with core data from the same Expedition/Hole.

10. List the input datasets and ancillary information used to produce the data.
Original log data are acquired from one or more "passes" (runs) of one or more "toolstrings" at one or more "holes" at one or more "sites" during each expedition (cruise), and transmitted to shore, accompanied by written reports.

11. List web pages and other links that provide information on the data.
http://www.ldeo.columbia.edu/BRG/

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. Original log data are stored as Digital Log Information Standard (DLIS) files, and processed to yield a collection of ascii tabular logs, GIF images, and seismic binary data. These will be bundled for each expedition/hole, and accompanied by a ISO 19115-2 series-level metadata record.

13. Indicate the data file format(s).
1. TSV

14. Are the data files compressed?
No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).
Typically PROGRAM/EXPEDITION/HOLE/CATEGORY/EXPEDITION-HOLE-TOOL-STRING-PASS.FILETYPE
eg. iodp-usio/exp352/U1442A/standard/352-U1442A_cali-hlds1.dat
where CATEGORY is "standard", "hi_res", etc, and TOOL and STRING are controlled vocabularies defined by the LDEO Borehole Research Group.

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
Each ISO 19115-2 series-level metadata record will contain a checksum manifest of all files from the specified expedition/hole.

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 400GB
Number of Data Files: 30000

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

One additional submission on September 30 2015 will include the final year of IODP 2013-2014 log data following release from standard 1-year moratorium.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: 61 Route 9W, Palisades, NY 10964 USA
System Name: brg.ldeo.columbia.edu
System Owner: LDEO Borehole Research Group
Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

rsync pull using same credentials as for IEDA and R2R rsync pulls

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. No web access

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

U.S. National Science Foundation requires all IODP data to be preserved.

24. Are the data archived at another facility or are there plans to do so? Please explain.

Live copy of the log data will continue to be served from the BRG Web server with search/browser/map interface, for the foreseeable future.

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

U.S. National Science Foundation requires all IODP data to be preserved.

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

Submission of IODP log data to NGDC is part of LDEO Borehole Research Group's contract obligation.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

Integrated Ocean Drilling Program (IODP)

29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

30. Add any other pertinent information for this request.

None